CLAIMS:

1. A process for producing a monoalkylated aromatic compound comprising th step of contacting a polyalkylated aromatic compound with an alkylatable aromatic compound in the liquid phase and in the presence of a transalkylation catalyst comprising TEA-mordenite having an average crystal size of less than 0.5 micron to produce a monoalkylated aromatic compound.

2. The process of claim 1, wherein the alkyl groups of the polyalkylated aromatic compound have 1 to 5 carbon atoms.

3. The process of claim 1, wherein the polyalkylated aromatic compound is selected from polyethylbenzene and polyisopropylbenzene and the alkylatable aromatic compound is benzene.

4. A process for producing a monoalkylated aromatic compound comprising the steps of:

   (a) contacting an alkylatable aromatic compound with an alkylating agent in the presence of an alkylation catalyst to provide a product comprising said monoalkylated aromatic compound and a polyalkylated aromatic compound, and then

   (a) contacting the polyalkylated aromatic compound from step (a) with said alkylatable aromatic compound in the liquid phase and in the presence of a transalkylation catalyst comprising TEA-mordenite having an average crystal size of less than 0.5 micron to produce a monoalkylated aromatic compound.

5. The process of claim 4, wherein the alkylation step (a) is conducted in the liquid phase.

6. The process of claim 4, wherein the alkylating agent includes an alkylating aliphatic group having 1 to 5 carbon atoms.

7. The process of claim 4, wherein the alkylating agent is ethyl ne or propylen and the alkylatable aromatic compound is benzene.

8. The process of claim 4, wherein the alkylation catalyst of step (a) is selected from MCM-22, MCM-49, MCM-56 and zeolite beta.

9. The process of claim 4, wherein step (a) is conducted at a temperature between about 300° and 600°F (about 150° and 316°C), a pressure up to about 3000 psig (20875 kPa), a space velocity between about 0.1 and 20 WHSV, based on the ethylene feed, and a ratio of the benzene to the ethylene between about 1:1 and 30:1 molar.

10. The process of claim 4, wherein step (b) is conducted at a temperature of 100 to 260°C, a pressure of to 10 to 50 barg ~~(200 to 600 kPa)~~, and a weight hourly space velocity of 1 to 10 on total feed, and benzene/polyalkylated benzene weight ratio 1:1 to 6:1.